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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,499	09/30/2003	Theodore C. Tanner JR.	MS1-1349US	8575

22801 7590 02/19/2010

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EXAMINER	
GELAGAY, SHEWAYE	

ART UNIT	PAPER NUMBER
2437	

NOTIFICATION DATE	DELIVERY MODE
02/19/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

Office Action Summary	Application No.	Applicant(s)	
	10/676,499	TANNER ET AL.	
	Examiner	Art Unit	
	SHEWAYE GELAGAY	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9,11-22 and 46-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9,11-22 and 46-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/09 has been entered.

2. Claims 1, 3-6, 9, 11-14, 17-21, 46-54 have been amended. Claims 2, 10 and 23-45 have been cancelled. Claims 1, 3-9, 11-22 and 46-54 are pending.

Response to Arguments

3. Applicant's arguments filed on 11/19/09 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
> :
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 47 and 54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 47 and 54 recite "adjusting "consumption-rate" of the incoming stream" which was not described in the specification.

6. Claims 17-22, 48 and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17-22, 48 and 51 recite a system claim without any structural component and consists solely of language that could be implemented with only software. Claims 17-22, 48 and 51 do not provide any functional interrelationship to any software and hardware structural components to provide certain function that is processed by a computer.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 9, 11-15, 47, 50 and 53 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. In this case, method claims 9, 47, 50

and 53 neither transforms the claimed subject matter to a different state or thing nor they are tied to any computer or apparatus therefore are rejected under 35 USC 101. Dependent claims 11-15 do not cure the deficiencies of the independent claim, therefore, are also rejected for the same reason set forth above.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-9, 12-18, 20-22 and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felten et al. "Reading Between the Lines: Lessons from the SDMI Challenge" USENIX, August 13-17, 2001 in view of Cox et al. "Some general methods for tampering with watermarks" IEEE , 1998, pages 1-15 and in view of Rhoads et al. (hereinafter Rhoads) US 6,522,769.

As per claims 1, 8-9 and 16-17:

Felten teaches a processor-readable medium having processor-executable instructions that, when executed by a processor, performs a method comprising: observing and determining where a dynamic embedded-signal detection program module ("watermark detector") receives a subject input stream for the detector to perform detection thereon to determine if the stream has an embedded-signal therein;

(Abstract; 1. Introduction; 3.1 Attack and Analysis of Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten does not explicitly disclose intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector; and observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the detector. (5. Signal Transformation; 6. Intentional Attack) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

As per claim 18:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. In addition Rhoads further teaches wherein the watermark-detector

detector is further configured to detect and observe the watermark detector in a processor-readable memory of a computer to determine its location in such memory. (col. 15, line 59-col. 16, line 6)

As per claims 3, 11 and 19:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. In addition Cox further teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (5. Signal Transformation; 6. Intentional Attack)

As per claim 4-5, 12-13 and 20:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. In addition, Cox further discloses wherein the intervening comprises introducing a countersignal into the incoming stream. (5. Signal Transformation; 6. Intentional Attack)

As per claim 6, 14 and 21:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. In addition Cox further teaches maintaining the intervening while the input stream is being consumed. (5. Signal Transformation; 6. Intentional Attack)

As per claims 7, 15 and 22:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. In addition Cox further teaches wherein the type of the subject input stream is selected from a group consisting of image, audio, video, multimedia, software,

metadata, and data. (5. Signal Transformation; 6. Intentional Attack)

As per claims 52:

Felton teaches a method of facilitating circumvention of dynamic, robust, embedded-signal detection, the method comprising: observing a dynamic embedded-signal detection program module ("dynamic detector") in a processor-readable memory of a computer configured to dynamically detect watermarks in an input stream, based upon the observing the dynamic detector receives a subject incoming stream for the dynamic detector to perform embedded-signal detection thereon to determine if the subject incoming stream has an embedded-signal therein. (Abstract; 1. Introduction; 3.1 Attack and Analysis of Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten fails to explicitly disclose intervening with clear reception of the subject incoming stream, thereby hindering embedded-signal detection by the dynamic detector, wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. Cox in analogous art, however, teaches intervening with clear reception of the subject incoming stream, thereby hindering embedded-signal detection by the dynamic detector, wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

As per claims 48:

Felton teaches a system for facilitating circumvention of dynamic, robust, embedded-signal detection, the system comprising: a memory-location determiner configured to determine where, in a memory, an embedded-signal detection program module ("detector" receives a subject input stream for the detector to perform detection thereon to determine if the subject input stream has an embedded-signal therein. (Abstract; 1. Introduction; 3.1 Attack and Analysis of Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten fails to explicitly disclose an intervener configured to intervene with clear reception of the subject input stream, thereby hindering detection by the detector, wherein the intervening comprises adjusting the incoming rate for the input stream. Cox in analogous art, however, teaches an intervener configured to intervene with clear reception of the subject input stream, thereby hindering detection by the detector, wherein the intervening comprises adjusting the incoming rate for the input stream. (5.

Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

As per claims 49 and 50-51:

Felton teaches a computer-readable storage medium medium having computer-executable instructions that, when executed by a computer, performs a method for facilitating circumvention of watermark detection, the method comprising: determining where, in a memory, a dynamic watermark detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform watermark detection thereon to determine if the subject input stream has an embedded-signal therein. (Abstract; 1. Introduction; 3.1 Attack and Analysis of Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector, wherein the intervening comprises introducing a countersignal, the countersignal modifying the reception by introducing a noise countersignal. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector, wherein the intervening comprises introducing a countersignal, the countersignal modifying the reception by introducing a noise countersignal. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

3. Claims 3, 11, 19, 46-47 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felten et al. "Reading Between the Lines: Lessons from the SDMI

Challenge" USENIX, August 13-17, 2001 in view of Cox et al. "Some general methods for tampering with watermarks" IEEE , 1998, pages 1-15 and in view of Rhoads et al. (hereinafter Rhoads) US 6,522,769 and further in view of Tobias et al. WO 01/24530 (hereinafter Tobias).

As per claims 3, 11 and 19:

The combination of Felten, Cox and Rhoads teaches all the subject matter as discussed above. None of the prior art explicitly disclose wherein the intervening comprises adjusting "play-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (page 3, Summary of the Invention) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten, Cox and Rhoads with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

As per claims 46 and 53:

Felton teaches a computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs a method for facilitating circumvention of watermark detection, the method comprising: determining where, in a processor-readable memory, a dynamic watermark detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform watermark detection thereon to determine if the subject input stream has a watermark therein; (Abstract; 1. Introduction; 3.1 Attack and Analysis of

Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector, wherein the intervening comprises adjusting "play-rate" of the input stream. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

None of the prior art explicitly disclose wherein the intervening comprises adjusting "play-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (page 3,

Summary of the Invention) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten, Cox and Rhoads with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

As per claims 47 and 54:

Felton teaches a method of facilitate circumvention of dynamic, robust, embedded signal detection, the method comprising: determining where, in a processor-readable memory, a dynamic watermark detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform watermark detection thereon to determine if the subject input stream has a watermark therein; (Abstract; 1. Introduction; 3.1 Attack and Analysis of Technology A; 5. conclusion) In addition, Felten discloses refining attacks to introduce distortions.

Felten fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector, wherein the intervening comprises adjusting "play-rate" of the input stream. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 15, line 59-col. 16, line 6) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten and Cox with Rhoads in order to change the operation of a watermark detector. (Abstract; Rhoads)

None of the prior art explicitly disclose wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (page 3, Summary of the Invention; see *35 USC 112 rejection above*) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Felten, Cox and Rhoads with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shewaye Gelagay/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437